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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,535	12/23/2003	Inge Ostergaard	43315-201415	5781

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EXAMINER

STEPHENSON, DANIEL P

ART UNIT PAPER NUMBER

3672

DATE MAILED: 09/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/743,535	<b>Applicant(s)</b> OSTERGAARD, INGE	
	<b>Examiner</b> Daniel P. Stephenson	<b>Art Unit</b> 3672	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/23/03, 6/4/04, 8/19/04</u> | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities: reference to the claims should not be made within the specification, as claims may change during prosecution. References to the claims appear on page 1, line 4 and page 2, line 14. These references should be deleted.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7, 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cordiero et al. in view of the WIPO document '734 to Alpha Thames Ltd. (hereafter WIPO '734). Cordiero et al. (Figs. 1, 2 and 6) discloses a subsea system for separating fluid emanating from one or more subsea wells. It has a foundation structure (9) secured to the seabed. There is a header-piping module (2) mounted to the foundation structure. It is broadly read as being removable since it is capable of being removed. It is initially attached through lowering it vertically onto the foundation and would be removed by raising it vertically with relation to the foundation. It is lowered down onto a guide member on the foundation and the guide member corresponds to the center-of-gravity of the header-piping module. It has a number of inlets for receiving fluid to be processed. A module (31) is designed to be attached to the header-piping

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module by lowering it down vertically on to the header-piping module, and detached by lifting vertically. The header-piping module supports this module when it is mounted to the header-piping module. The header-piping module is designed to have a fluid outlet (6) that can be attached vertically to an external fluid conduit for transport of the fluid. It does not disclose that there is a separator-piping module removably mounted to the header-piping module, where the separator-piping module has a piping system for interconnecting different processing appliances of the system. Nor does it disclose that the piping system is arranged to be in fluid communication with the inlet of the header-piping module when the separator-piping module is mounted to the header-piping module. Nor does it disclose one or several insert modules, each of which is a processing appliance of the subsea system and are removably mounted to the separator-piping module, where the modules can be attached and removed by lowering them and raising them vertically in relation to a cavity within the separator-piping module. Nor does it disclose that the insert module is rotationally symmetric or that the receiver cavity has a corresponding shape. Nor does it disclose that the insert modules contain a gravitational separator. Nor does it disclose that there is a guiding member on the header-piping module to engage a guiding member of the separator-piping module, wherein the guide member is located at the center-of-gravity of the separator-piping module. WIPO '734 discloses (Fig. 22 and 23) a separator-piping module adapted to be removably mounted a piping module. Where the separator-piping module has a piping system for interconnecting different processing appliances of the system. The piping system is arranged to be in fluid communication with the inlet of the piping module when the separator-piping module is mounted to the piping module. One or several insert modules, each of which is a processing appliance of the subsea system and are

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adapted to be removably mounted to the separator-piping module. These modules can be attached and removed by lowering them and raising them vertically in relation to a cavity (12) within the separator-piping module. The insert module can be rotationally symmetric and since the receiver cavity receives the module it inherently has a corresponding shape. The insert module can be a gravity separator (15). The separator-piping module is designed to be lowered unto a guide member (5) located at the center-of-gravity of the separator-piping module. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the separator-piping module and insert of WIPO '734 with the header-piping module of Cordiero et al. This would be done because it would allow the simultaneous separation for a number of wellbores before being pumped to the surface.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cordiero et al. in view of WIPO '734 as applied to claim 6 above, and further in view of Dozier. Cordiero et al. in view of WIPO '734 shows all the limitations of the claimed invention, except Cordiero et al. in view of WIPO '734 does not explicitly disclose that there is a flange on the upper part of the receiver that bears on a corresponding flange on the insert module forming a water-tight seal. Dozier discloses a separator insert module that is received in a cavity both of which have corresponding flanges that form a watertight seal when in abutment. It would have been obvious to one of ordinary skill in the art at the time the invention was made to place the module and cavity of Dozier on the system of Cordiero et al. in view of WIPO '734. This would be done to protect the module from the outside environment.

5. Claims 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cordiero et al. in view of WIPO '734 as applied to claim 1 above, and further in view of Appleford '901.

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Cordiero et al. in view of WIPO '734 shows all the limitations of the claimed invention, except Cordiero et al. in view of WIPO '734 does not explicitly disclose that the separator module is a cyclonic separator for separating out solids, oil or gas, a water pump or a ball-valve. Appleford et al. '901 discloses using a water pump, ball valve, or sand cyclone as a separator insert for the system of Cordiero et al. in view of WIPO '734. This would be done to provide different fluid controls subsea.

It is taken as Official Notice that it is notoriously in the separation art to use a number of processing cyclones, i.e. water/oil, gas/water, solid/oil, etc., to process fluid. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use these types of cyclones with the apparatus of Cordiero et al. in view of WIPO '734 and Appleford '901. This would be done to suit the requirements of the fluid being processed.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hoel et al. and Château et al. show similar elements to the present invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel P. Stephenson whose telephone number is (571) 272-7035. The examiner can normally be reached on 8:30 - 5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Bagnell  
Supervisory Patent Examiner  
Art Unit 3672

DPS 